

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 05-038464  
(43)Date of publication of application : 19.02.1993

(51)Int.Cl.

B02C 21/00  
B01D 50/00  
B02C 15/00  
B03C 1/02  
B07B 7/083

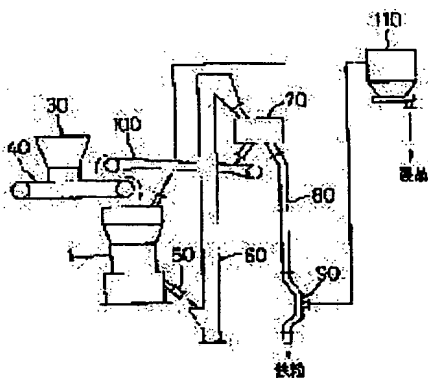
(21)Application number : 03-280922 (71)Applicant : UBE IND LTD  
(22)Date of filing : 02.08.1991 (72)Inventor : HISAIE KAZUTOSHI  
KASAI YURIO  
KURANARI KAZUKI

## (54) SLAG CRUSHING EQUIPMENT

(57)Abstract:

PURPOSE: To provide slag crushing equipment by which iron grains in raw material slag can be taken out and recovered with good efficiency and in the state of high purity during crushing and in which the wearing amount of a crushing section is reduced.

CONSTITUTION: Slag crushing equipment comprises a vertical crusher 1, a bucket elevator 60, a magnet separator 70, an iron grain and slag powder separator 90 and a dust collector 110, and the iron grain and slag powder separator 90 is provided with at least one inclined tube or more being inner lined on their inner faces.



## LEGAL STATUS

[Date of request for examination] 17.01.1995  
[Patent number] 2666097  
[Date of registration] 27.06.1997  
[Date of extinction of right] 27.06.2003

## Description of [0013] in JP 05-038464

[0013]

Movement of the slag crushing equipment of the present invention which is thus structured is described below. A specific amount of a raw material slag in a raw material hopper 30 is supplied in a vertical type pulverizer 1 using a constant feed ware 40. The supplied raw material slag is pulverized by interactions between a rotary table 3A and a pulverizing roller 4. Fine powder is classified in a separator 13 equipped on the top, and a classified fine powder is collected by a dust collector 110 through an outlet and a piping to be used as a product (slag powder). On the other hand, iron particles on the rotary table 3A of the vertical type pulverizer 1 are discharged from a foreign substance outlet with coarse particles of the slag (particles having a relatively large particle size). The iron particles with the coarse particles go through a duplex damper 50 and a bucket elevator 60 and enter into a magnetic separator 70 equipped just below an outlet of the bucket elevator 60, and are separated into the iron particles and the coarse particles of the slag by a magnetic separation. The coarse particles of the slag are resupplied to the vertical type pulverizer 1 through a belt conveyor 100. The iron particles fall into a vertical pipe 80, and slag particles on a surface of the iron particles are exfoliated by a iron particles / slag particles separator 90 equipped in the lower part of the vertical pipe 80, and are conveyed to a dust collector 110 by pneumatic transport. On the other hand, the iron particles are discharged from a piping under the iron particles / slag particles separator 90.

(19)日本国特許庁(JP)

(12) 公開特許公報(A)

(11)特許出願公開番号

特開平5-38464

(43)公開日 平成5年(1993)2月19日

(51)Int.Cl. <sup>3</sup>	識別記号	庁内整理番号	F I	技術表示箇所
B 0 2 C 21/00	A	7112-4D		
B 0 1 D 50/00	A	7059-4D		
B 0 2 C 15/00		9042-4D		
B 0 3 C 1/02	Z	7726-4D		
B 0 7 B 7/083		8925-4D		

審査請求 未請求 請求項の数1(全 5 頁)

(21)出願番号 特願平3-280922

(22)出願日 平成3年(1991)8月2日

(71)出願人 000000206

宇部興産株式会社

山口県宇部市西本町1丁目12番32号

(72)発明者 久家 和利

山口県宇部市大字小串字沖の山1980番地  
宇部興産株式会社宇部機械製作所内

(72)発明者 笠井 百合夫

山口県宇部市大字小串字沖の山1980番地  
宇部興産株式会社宇部機械製作所内

(72)発明者 蔵成 和樹

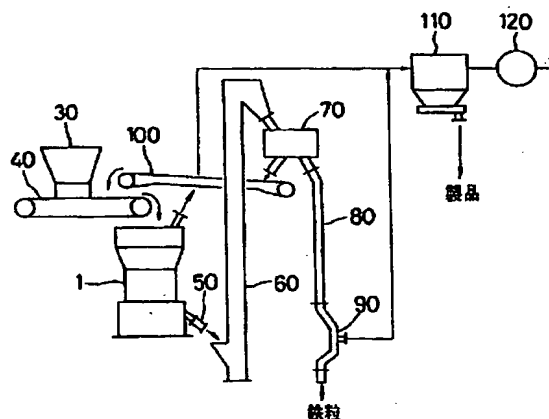
山口県宇部市大字小串字沖の山1980番地  
宇部興産株式会社宇部機械製作所内

(54)【発明の名称】 スラグ粉砕設備

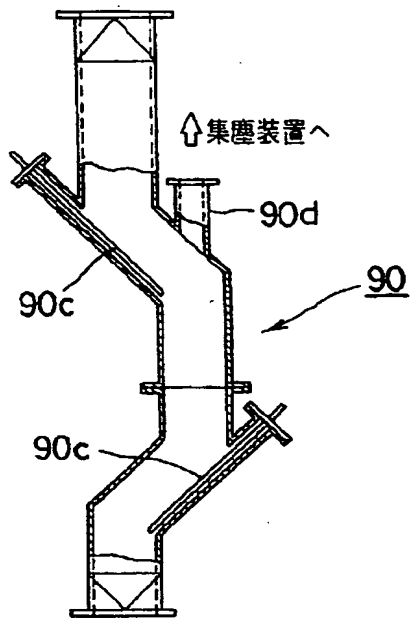
(57)【要約】

【目的】 原料スラグ中の鉄粒を粉砕中効率良く、かつ、純度の高い状態で取り出し回収するとともに、粉砕部の摩耗量を低減したスラグ粉砕設備を提供する。

【構成】 縦型粉砕機1とバケットエレベータ60とマグネットセパレータ70と鉄粒・スラグ粉分離機90と集塵装置110とを含むスラグ粉砕設備であって、該鉄粒・スラグ粉分離機90は内面に耐摩耗材を内張りさせた少なくとも1つ以上の傾斜管を備えた構成とした。



【図3】



【図4】

